### MISCELLANEOUS NOTES

### REFERENCES

- ALOCK, J. (1998): Parental Care. *In*: Animal Behaviour (Ed.: Alock, J.). Sinauer Associates Inc. Sunderland. Massachusetts. 527 pp.
- BERNSTEIN, 1. (1968): The Lutong of Kaula Selangor. Behaviour 32(1/3): 1-16.
- BRADBURY, J.W. (1977): Social organisation and communication. *In*: Biology of Bats (Ed: Wimsatt, W.A.). Academic Press, New York, Pp. 1-72.
- BROSSET, A. (1962): The bats of central and western India, Part 1. J. Bombay Nat. Hist. Soc. 59: 1-57.
- DAVIS, W.H. (1966): Population dynamics of the bat *Pipistrellus* subflavus. J. Mammal. 47: 383-396.
- DAVIS, W.H., R.W. BARBOUR & M.D. HASSELL (1968): Colonial behaviour of *Eptesicus fuscus*. J. Mammal. 49: 44-50.
- GOPALAKRISHNA, A. & N. BADWAIK (1993): Breeding habits and associated phenomena in some Indian bats, Part XIV (concluded). J. Bombay Nat. Hist. Soc. 90(1): 1-9.
- GRIFFIN, D.R. (1940): Notes on the life histories of New England cave bats. J. Manumal. 21: 181-187.
- ITANI, J. (1959): Parental care in wild Japanese monkey, Macaca fuscata fuscata. Primates 2(1): 61-93.

- KULZER, E. (1958): Untersuchen uber die Biologie von Flughunden der Gattung Rousettus, Z. Morphol. Oekol. Tiere 47: 374-402.
- McCANN, C. (1934): Observations on some of the Indian langurs. J. Bombav Nat. Hist. Soc. 36(3): 618-628.
- McCANN, C. (1940): Notes on the fulvous fruit-bat (Rousetlus leschenaulti Desm.). J. Bombay Nat. Hist. Soc. 41: 805-816.

NELSON, J.E. (1965): Behaviour of Australian Pteropodidae (Megachiroptera). Anim. Behav. 13: 544-557.

- O'FARRELL, M.J. & E.H. STUDIER (1973): Reproduction, growth and development in *Myotis thysanodes* and *M. lucifugus* (Chiroptera: Vespertilionidae). *Ecology* 54: 18-30.
- PEARSON, O.P., M.R. KOFORD & A.K. PEARSON (1952): Reproduction of the lump-nosed bat (*Corynorhinus rafinesquei*) in California. J. Mammal. 33: 273-320.
- ROWELL, T.E. (1963): The social development of some rhesus monkeys (1961 seminar). Pp 35-49. *In*: Determinants of Infant Behaviour (Ed.: Foss, B.M.), Vol. II. Methuen, London.
- SIMONDS, P.E. (1965): The bonnet macaque in South India. Pp. 175-196. In: Primate Behavior (Ed: DeVore, 1.) Holt. New York.

# 3. NEW SITE RECORD FOR SMALL TRAVANCORE FLYING SQUIRREL *PETINOMYS FUSCOCAPILLUS FUSCOCAPILLUS* FROM KARNATAKA

As part of a mammalian study, we surveyed the forests of Brahmagiri-Makut during November 2001 and January 2002. The forests of Brahmagiri-Makut lie between 12° 5'-12° 13' N and 75° 50'-76° 3' E, and form the southern tip of the Western Ghats in Karnataka, in the district of Kodagu. Elevation varies from 60 m above msl to 1,650 m above msl. The area receives both southwest and northeast monsoon and the average annual rainfall is about 6,000 mm. The region includes three forest ranges, namely Srimangala, Makut (Wildlife) and Makut (Reserve Forest). Srimangala and Makut (Wildlife) are a part of the Brahmagiri Wildlife Sanctuary.

We walked 54 km during nights with about 21 'spotlight hours'. A total of five (0.19 animals/spot-hour) Small Travancore Flying Squirrels were sighted in the western slopes of the Makut (Wildlife) and Makut (Reserve Forest) ranges. No animal was sighted in the Srimangala range, adjacent to Makut. The animals were located up to 200 m above msl. Local people were also interviewed for more information on the species. Local people from the western side of these hills in the adjoining state of Kerala reported having sighted this species in their coconut and cashew nut gardens. Since this species raids cashew gardens during the crop season to feed on cashew kernel, it is hunted by the locals, who also eat its meat.

Two species of flying squirrels are described from Peninsular India (Prater 1993): the Small Travancore Flying Squirrel *Petinomys fuscocapillus fuscocapillus* and the Large Brown Flying Squirrel (*Petaurista philippensis*). The Large Brown Flying Squirrel occurs throughout Peninsular India, whereas the Small Travancore Flying Squirrel is believed to be restricted to some parts of the Western Ghats. Kurup (1989) rediscovered the Small Travancore Flying Squirrel in coconut groves in coastal Kerala, after a gap of 70 years. Ashraf et al. (1993) conducted a survey of flying squirrels in the Indira Gandhi Wildlife Sanctuary in Tamil Nadu and Kudremukh National Park in Karnataka. The Small Travancore Flying Squirrel was recorded only from the Indira Gandhi Wildlife Sanctuary. We have also surveyed the rainforests of Sirsi-Honnavara region north of Sharavati river, and found that the species was absent. The ex-hunters and active hunters also reported that the species was never sighted in the region. Therefore, the sighting of this species in Brahmagiri-Makut is the first report from the forests of Karnataka.

It may be seen from the available literature that this species has only been sighted from three locations so far. To understand its current distribution and status, further surveys are required along the coastal forests and western slopes of the Western Ghats.

December 17, 2002

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## MISCELLANEOUS NOTES

### REFERENCES

Ashraf, N.V.K., A. KUMAR & A.J.T. JOHNSINGH (1993): On the relative abundance of two sympatric squirrels of Western Ghats, India. J. Bombay Nat. Hist. Soc. 90: 158-162.

KURUP, GU. (1989): Rediscovery of the small Travancore flying squirrel. Oryx 23: 2-3.

PRATER, S.H. (1993): The Book of Indian Animals, 4th impression. Bombay Natural History Society. Bombay.

# 4. A CASE OF TOTAL ALBINISM IN THE FIVE-STRIPED PALM SQUIRREL FUNAMBULUS PENNANTI WROUGHTON IN SINDHUDURG DISTRICT, MAHARASHTRA STATE

Albinism in wild rodent species is a rare occurrence, though it has been reported in some cases such as *Cremnomys blanfordi* (Rajagopalan 1967), *Bandicota indica*, *Rattus rattus* (Pradhan 1975) and *Funambulus pennanti* (Chaturvedi and Ghose 1984). Harrison (1950) has also dealt with albinism as well as melanism in rodent species. Apart from albinism, Pradhan (1975, 1993) and Bhat (1979) have reported occurrence of white patches on thoracic and inguinal regions in the species of *Rattus*, *Bandicota*, *Mus* and *Golunda*. Pradhan and Mithel (1981) indicated possible genetic control for occurrence of white patch in *Rattus rattus rufescens*.

Albinism in Five-striped palm squirrel has been reported from the erstwhile Oudh, Uttar Pradesh (Agrawal and Chakraborty 1979) and Chandigarh (Chaturvedi and Ghose 1984) in India. Since then, no specific report of albinism in this Indian rodent species is available. In November 2001, a team from the Zoological Survey of India, Pune visited different areas of Sindhudurg district, Maharashtra State, to conduct a status survey on the Indian Edible-nest Swiftlet Collocalia unicolor (Jerdon). The team came across a live albino form of a squirrel species. Observing through a pair of 7 x 50 binoculars, we noticed that the individual was white with faint red spots, narrow stripes on the flanks, pink eyes and vellowish forehead. Two species of striped squirrels have been reported from this region (Ellerman 1961): 1. Three-striped Jungle Squirrel Funambulus tristriatus with three stripes and a distinct red colouration in the inguinal region and on the ventral side of the tail and 2. Five-striped Palm Squirrel Funambulus pennanti with five stripes and no red colouration in the inguinal region and below the tail. The F. pennanti specimen studied by Chaturvedi and Ghose (1984) from Chandigarh was a spotless white. One of us (MSP) identified the live albino squirrel, photographed near Deogad Fort, as Funambulus pennanti Wroughton (Photographic evidence provided by the authors - Eds). The squirrel was seen moving on a rocky wall of the fort in the morning hours of November

22, 2001. Deogad Fort (16° 23' N, 73° 21' E) is situated very close to the Arabian Sea in the Deogad taluka, Sindhudurg district, Maharashtra State.

After a while, AM and RMS spotted a solitary albino young (hardly a foot away from where the adult was first sighted), which quickly moved into the nesting site, in an inaccessible rocky crevice, depriving us of a photographic opportunity. Further attempts to locate both the individuals were futile. Hutt (1969) considered albinism as an indication of infertility. However, in the present case, sighting of an albino young with an albino adult indicates the likelihood of a naturally breeding albino population of *F. pennanti* in the wild.

The present report of albinism in *F pennanti* is probably the third from India. Albinism is known to occur when the genes for pigmentation fail to be expressed, and its occurrence in the wild is rare.

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## REFERENCES

AGRAWAL, V.C. & CHAKRABORTY (1979): Catalogue of Mammals in the Zoological Survey of India. Rodentia Part I. Sciuridae. *Rec. zool. Surv. India* 74(4): 333-481. BHAT, SUDHA (1979): Studies on Bombay rats. Ph.D. Thesis, Bombay University, Bombay.

CHATURVEDI, Y. & A.K. GHOSE (1984): A case of albinism in the five